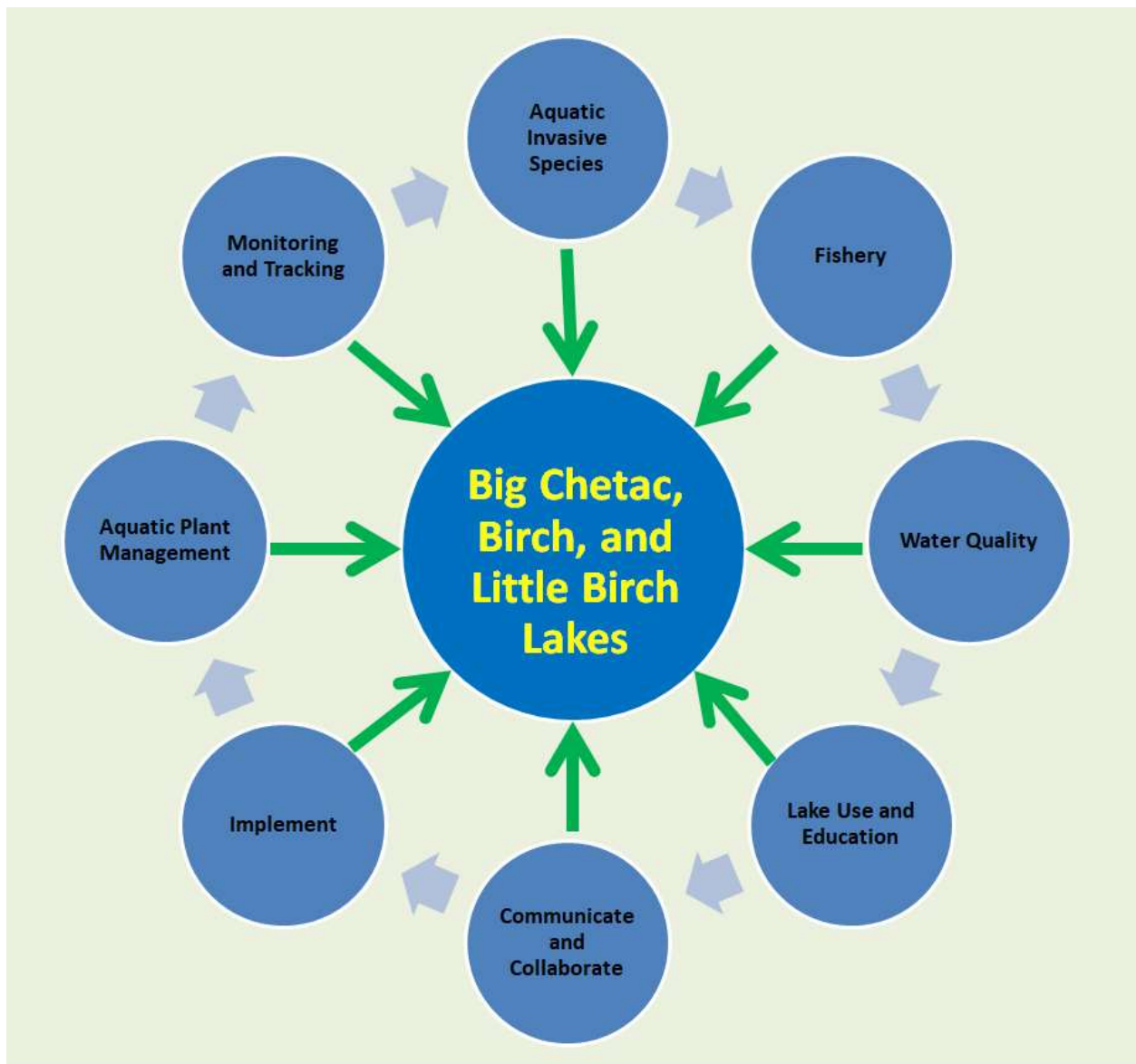


Appendix A: Goals, Objectives, and Actions included in the Comprehensive Management Plan for Big Chetac, Birch, and Little Birch Lakes (December 30, 2019)



Goal: Promote and support a healthy, diverse, and sustainable fishery Big Chetac, Birch, and Little Birch Lakes

- 1) Objective 1: Develop a Fisheries Management Plan for the Big Chetac Chain of Lakes.
 - a) **Action A:** Form a Fisheries Management Committee with representation from the different fishing interests on Big Chetac, Birch, and Little Birch Lakes and oversight by the WDNR with the sole purpose of developing a Fisheries Management Plan in 2019

- 2) Objective 2: Improve in-lake fisheries habitat through the installation of Fishsticks Habitat Projects through the Healthy Lakes Initiative.
 - a) **Action A:** Work with property owners to install a minimum of 10 Fishsticks fisheries habitat improvement projects in Big Chetac, Birch, and Little Birch Lakes in five years.

Goal: Maintain and/or improve water quality in Big Chetac, Birch, and Little Birch Lakes to make them more appealing, more attractive for recreation, and better able to support a healthy and diverse ecosystem. The seasonal (June 1-September 15) target phosphorus level for Big Chetac Lake is 55ppb. For Birch/Little Birch Lake it is slightly less at 47ppb.

- 1) Objective 1: Reduce the combined nutrient loading from all sources by 18% (from 11,748-lbs to 9,639-lbs) based on 2010 CLMP numbers.
 - a) **Action A:** Work with property owners adjacent to the lakes to reduce the amount of impervious surface and lawns in the nearshore area.
 - i) Encourage and support the conversion of 50% of lawn to natural areas (50-60 acres)
 - (1) Reduces phosphorus loading from this source by 18.5%
 - ii) Protect and maintain undeveloped properties adjacent to the shores of the lakes
 - (1) Encourage and support properties to be preserved through land acquisition, the stewardship program, and/or easements
 - b) **Action B:** Work with property owners adjacent to the lakes to maintain septic system and gray water compliance on all riparian properties according to the Sawyer County Private Sewage System Ordinance (2011)
 - i) Provide reminders in a newsletter, on Facebook, on the webpage, and in meetings and/or discussion events sponsored by the BCABLA
 - c) **Action C:** Identify and support implementation of watershed best management practices related to agriculture, forestry, and mining that will reduce runoff and minimize the nutrient loading into Big Chetac and Birch Lakes.
 - i) Work with Sawyer and Washburn Counties to identify current and future agricultural activity and forestry projects in the watershed
 - ii) Encourage and support conservation tillage, cover crops, and/or land retirement on 50% of row crops (100-150 acres)
 - (1) Reduces phosphorus loading by from this source by approximately 9.0%
 - (a) Converting 100% of row crops would reduce phosphorus loading by approximately 18.0%.
 - iii) Encourage and support installation of grassed waterways and buffers on 25% of the pasture land (425-650 acres)
 - (1) Reduces phosphorus loading from these sources by 10%
 - iv) Encourage appropriate forestry practices within the watershed
 - d) **Action D:** CLP bedmapping and management
 - i) Complete CLP bedmapping at least every other year to determine surface area and density
 - (1) Calculate CLP loading annually based on what is mapped
 - (a) At 509 acres, the reduction in the amount of CLP has already met the 18%
 - ii) Harvest or chemically treat enough CLP to help meet total phosphorus reduction goals
 - e) ***Action E:** Application of alum in Big Chetac Lake
 - i) *Currently not supported by the general constituency
- 2) Objective 2: Complete an update of nutrient and water budgets for Big Chetac Lake and Birch lakes.

- a) **Action A:** Work with the WDNR, Red Cedar River Water Quality Partnership, and the Red Cedar Lakes Association, and other resource professionals to design a project that will establish new nutrient and water budgets for all lakes (Big Chetac, Birch, Little Birch, Balsam, Red Cedar, and Hemlock) in the Red Cedar Lake Watershed
 - b) **Action B:** Support, through available resources and volunteer services, a Lake Management Planning grant application to complete nutrient and water budgets for the lakes in the Red Cedar Lake Watershed
- 3) Objective 3: Sponsor an alum treatment education, information, and public involvement outreach campaign.
- a) **Action A:** Through community meetings, public surveys, and other media outlets review and discuss the implications of and determine support for application of alum in the North basin of Big Chetac Lake.
- 4) Objective 4: Evaluate the need for an Alum Study for Birch Lake.
- a) **Action A:** After water and nutrient budgets have been established for Birch Lake, evaluate the need for a study
 - b) **Action B:** Complete an alum study on Birch Lake if needed.

Goal: Reduce the threat that new aquatic invasive species (AIS) will be introduced into and go undetected in Big Chetac, Birch and Little Birch Lakes.

- 1) Objective 1: Educate boaters on methods to prevent the spread of AIS into and out of Big Chetac, Birch, and Little Birch Lakes.
 - a) Action A: Implement and/or maintain a watercraft inspection program (Clean Boats, Clean Waters) at the Birch Lake Landing by the dam, and at the WDNR public access at Ol' Hayes Road.
 - b) Action B: Design and install new signage that is more complete and informative than the common WDNR AIS signage at the four public landings: two on Big Chetac (Ol' Hayes Road & the NE Shore) and two on Birch (Dam and Doolittle Park)
 - c) Action C: Engage Resort Owners in the installation of WDNR AIS signage or AIS signage designed by the BCABLA at private (resort) access points on the lakes.

- 2) Objective 2: Monitor all three lakes for AIS currently not listed as being present, or that may be present at low levels.
 - a) Action A: Implement/maintain an AIS monitoring program following WDNR Citizen Lake Monitoring Network (CLMN) guidelines.

- 3) Objective 3: Promote constituent AIS education and training.
 - a) Action A: Plan and implement at least one annual AIS education event and include AIS education/ information materials in at least one annual mailing to the lake constituency.

Goal: Balance various lake uses on Big Chetac, Birch, and Little Birch Lakes so residents and lake users can share in many recreational opportunities that are available.

- 1) Objective 1: Review and report on existing town ordinances regarding lake use on all three lakes.
 - a) **Action A:** Work with the Towns of Edgewater and Birchwood to identify existing ordinances regarding the lakes and determine if any modification should be made, or if new ordinances should be made.
 - b) **Action B:** Work with the Village of Birchwood to identify existing ordinances regarding Birch and Little Birch lakes and determine if any modification should be made, or if new ordinances should be made.
 - c) **Action C:** Present proposals for modification to existing ordinances or for new ordinances to the general community for input.
 - d) **Action D:** Implement changes to local ordinances

- 2) Objective 2: Open and maintain dialogue between the BCABLA and fishing tournament sponsors.
 - a) **Action A:** Designate a BCABLA member to act as a liaison between local fishing tournament sponsors and the BCABLA for communication and sharing of information.

- 3) Objective 3: Increase level of lake stewardship both on the water and on the shores of Big Chetac, Birch, and Little Birch Lakes.
 - a) **Action A:** Educate and inform lake residents about state and local guidelines, zoning regulations, and ordinances pertaining to the shores and water.
 - b) **Action B:** Work with the towns, village, and local businesses/resorts to garner support for a seasonal “lake educator”. The Lake Educator would spend time on all three of the lakes, report regularly to the BCABLA and other Sponsors; and could act as the Fishing Tournament Liaison.
 - c) **Action C:** If appropriate support can be garnered in Action 2, hire a seasonal Lake Educator to spend time on all three lakes promoting good lake stewardship practices.

- 4) Objective 4: Educate and inform property owners about best management practices in the nearshore area that can improve natural habitat and reduce runoff and nutrient loading.
 - a) **Action A:** Provide lake constituent training through workshops introducing nearshore best management practices and how to implement them.
 - b) **Action B:** Encourage implementation of nearshore best management practices through WDNR Healthy Lakes grants.
 - c) **Action C:** Recognize property owners who implement nearshore best management practices through the Healthy Lakes Program and other outlets.

- 5) Objective 5: Provide targeted nuisance and navigation relief from dense growth non-native and native aquatic vegetation for affected property owners (including resorts) on all three lakes.

- a) **Action A:** Work with Stakeholders to identify areas in all three lakes that would benefit from a nuisance and navigation harvesting program for CLP in the spring and dense growth native vegetation in the summer.
- b) **Action B:** Contract with local providers of small-scale harvesting contracting to implement harvesting for nuisance and navigation purposes in areas identified in Action 1
- c) **Action C:** Consider small-scale application of aquatic herbicides to provide lake access only if implementation of Action 2 in any areas of the three lakes cannot be completed due to lake characteristics.

Goal: Complete appropriate and on-going tracking, monitoring, and management strategy modification to allow for thorough evaluation of management actions, and to determine if those management actions are on target, on track, on schedule, on budget, and within the expected parameters.

- 1) Objective 1: Track surface water quality changes in Big Chetac, Birch, and Little Birch Lakes.
 - a) **Action A:** Continue expanded CLMN surface water quality monitoring in the North and Central basins of Big Chetac Lake.
 - b) **Action B:** Add regular surface water quality monitoring of TP and Chlorophyll A (ChlA) in the South basin of Big Chetac Lake.
 - c) **Action C:** Add regular surface water quality monitoring of Secchi, TP, ChlA, temperature, and dissolved oxygen in Birch Lake.
 - d) **Action D:** Add September and October TP and ChlA to all three sites on Big Chetac Lake and on Birch Lake.

- 2) Objective 2: Complete more regular water clarity and temperature/dissolved oxygen profiles in all three sites on Big Chetac Lake and on Birch Lake.
 - a) **Action A:** Lake volunteers will be instructed to collect this data a minimum of two times per month (three times would be better) between April and October

- 3) Objective 3: Document nutrient and sediment contributions to Big Chetac, Birch, and Little Birch Lakes from the three main tributaries (Portions of this objective could be done via Objective 5 in the water quality goals for Big Chetac, Birch, and Little Birch lakes.)
 - a) **Action A:** Collect TP, total suspended solids (TSS), flow, and volume data four or more times from each tributary annually.
 - b) **Action B:** Collect annual rainfall data from at least two locations on opposite ends of the system by enrolling in the Community Collaborative Rain, Hail, and Snow (CoCoRaHS) precipitation monitoring program.

- 4) Objective 4: Complete fisheries monitoring as determined in a Fisheries Management Plan.
 - a) **Action A:** After the completion of a Fisheries Management Plan for the Big Chetac Chain of Lakes, implement monitoring actions recommended in that plan.

Improve communication and collaboration between public, local governments, WDNR, and the Big Chetac and Birch Lakes Association to support achievement of shared lake management goals.

- 1) Objective 1: Increase the amount of community, constituent, and public involvement in lake management and general lake operation.
 - a) **Action A:** Review the function and format of existing BCABLA Committees. Determine if additional committees are needed.
 - b) **Action B:** Present committee recommendations from Action 1 to the BCABLA constituency; implement recommended changes
 - c) **Action C:** Fulfill committee needs including members and resources

- 2) Objective 2: Seek regular community, constituent, and public input regarding lake management planning and implementation.
 - a) **Action A:** Hold regular meetings of the BCABLA. There is one annual meeting required by the Association By-laws.
 - b) **Action B:** Hold public stakeholder forums, listening sessions, and planning sessions.
 - c) **Action C:** Continue to support BCABLA on the web, Facebook, and other social media outlets.

Implement the Big Chetac, Birch, and Little Birch Lakes Management Plan effectively and efficiently with a focus on community, public, and constituent education, information, and involvement.

- 1) Objective 1: Set, evaluate, and modify (if necessary) project priorities annually.
 - a) **Action A:** Prioritize project tasks for each year by reviewing the Funding, Priorities, and Implementation Matrix provided as part of this management plan.
- 2) Objective 2: Summarize the results of management actions implemented as a part of this plan.
 - a) **Action A:** Complete annual summaries, mid-plan summaries, and end of plan summaries evaluations.
- 3) Objective 3: Keep stakeholders involved in the entire management process.
 - a) **Action A:** Complete annual management planning based on needs of the lakes and available resources.
 - b) **Action B:** Strive for continuous communication between the community, public, and constituency and resource personnel from the BCABLA, WDNR, local Towns and Village, Sawyer and Washburn Counties, Tribal Resources, Red Cedar River Watershed Committee, and Consultants.
- 4) Objective 4: Seek outside funding to support management actions.
 - a) **Action A:** Discuss grant options with the BCABLA, WDNR, and other grant resources.
 - b) **Action B:** Solicit funds from the local Towns, Village, and other community resources.
 - c) **Action C:** Explore opportunities to access Federal funds associated with the Red Cedar River Watershed/Tainter-Menomin TMDL.
 - d) **Action D:** Look for other non-mainstream sources of financial support. (Example – Hayward Area Visitors and Convention Bureau proposal for a Room Tax allocation to local units of government.)

Goal: Provide navigation relief from dense growth native and non-native aquatic vegetation in areas of all three lakes and focused on property owners, resorts, and public use corridors determined annually.

- 1) Objective 1 - Reduce navigation impairments caused by dense growth native aquatic vegetation.
 - a) **Action A:** Identify areas of dense growth native vegetation that may be causing navigation issues
 - i) Solicit requests for navigation relief from property owners
 - (1) Prior to June 15 each year
 - ii) Apply for a WDNR Aquatic Plant Harvesting Permit
 - (1) Based on prior year requests and current year requests if received prior to date of permit submittal.
 - iii) Complete on-lake survey of areas included in the permit request prior to management implementation
 - (1) Between June 16 and July 1 each year
 - b) **Action B:** Implement aquatic plant management in areas determined to cause navigation issues
 - i) Small-scale aquatic plant harvesting prior to August 1 each year
 - (1) Option 1 – Contracted harvesting
 - (2) Option 2 – Purchase of an aquatic plant harvester by the BCABLA
 - (a) Harvested lanes would be no more than 20-ft wide, and limited to 3-ft of water or deeper. Only 2/3 of the water column, or 5-ft of depth, depending on which is less will be harvested.
 - (b) Harvested material will be disposed of in areas identified ahead of time and approved by the WDNR
 - (3) Option 3 – Small-scale (<10-ac) application of aquatic herbicides
 - (a) Only in areas not accessible by a harvester due to stumps or other obstacles
 - (i) Chemical application in lieu of harvesting simply because harvesting was not pursued is not a justification for use of herbicides
 - (b) Permit applied for by the BCABLA w/letters of approval from all adjacent property owners
- 2) Objective 2 – Plan and consider implementation of CLP management actions.
 - a) **Action A:** Document changes in CLP distribution and density in Big Chetac, Birch, and Little Birch lakes.
 - i) Complete whole-lake, cold-water, point-intercept, CLP surveys every 2-3 years
 - (1) Only survey points considered to be in the littoral zone of all three lakes
 - (2) Work with a consultant to document the presence or absence and density of CLP at each survey point
 - (3) Complete the survey in the last two weeks of May
 - (4) Compare to previous surveys
 - b) **Action B:** identify potential areas of navigation impairment caused by dense growth CLP
 - i) Review prior year survey results and current year survey results (if available)
 - c) **Action C:** Annually determine larger areas of dense growth CLP that could be harvested to provide nuisance and navigation relief and help meet phosphorus loading reduction goals.

- i) Determine feasibility, property owner/constituent support, and available funding
 - d) **Action D:** Contract with local providers of small-scale harvesting to implement harvesting for nuisance and navigation purposes in areas
 - i) Harvested areas will be limited to 3-ft of water or deeper. Only 2/3 of the water column, or 5-ft of depth, depending on which is less will be harvested.
 - ii) Harvested material will be disposed of in areas identified ahead of time and approved by the WDNR
 - e) **Action E:** Small-scale (<10-ac) application of aquatic herbicides
 - i) Only in areas not accessible by a harvester due to stumps or other obstacles
 - (1) Chemical application in lieu of harvesting simply because harvesting was not pursued is not a justification for use of herbicides
 - (2) Permit applied for by the BCABLA w/letters of approval from all adjacent property owners
- 3) Objective 3 - Maintain or improve current (2017) measurements of the health of the native aquatic plant community in all three lakes.
- a) **Action A** – Compare measurements of the health of the native aquatic plant community prior to and after a multi-year aquatic plant management project.
 - i) A whole-lake, summer, PI aquatic plant survey will be completed after five years of active aquatic plant management with results compared to the last whole-lake PI survey.
 - ii) Known wild rice populations will be surveyed annually and the entire littoral area/shoreline surveyed for wild rice every five years.